

The Social Science Bulletin
A Monthly Review of the Social Sciences
at
Mississippi State College

LEE B. GAITHER

Mississippi's Mineral Resources; a Survey

DEWEY M. McCAIN

How We "Revised" Our Curricula in Engineering at Mississippi State
College

GORDON K. BRYAN and AUGUSTIN MAGRUDER

Does Mississippi Need a Heever Commission? An Examination of the
Reorganization Problem in Mississippi

JOHN K. BETTERSWORTH

The Swaddling Months: Locating, Choosing the First President, and
Erecting the First Buildings of Mississippi A & M College

J. V. PAGE

Farm Adjustments in the Delta (An Abstract)

Social Science Activities at Mississippi State College During the
Months of February and March

PUBLISHED BY

The Social Science Council
MISSISSIPPI STATE COLLEGE

Vol. III, No. 2

MARCH, 1950

Contributors

Lee B. Gaither (MISSISSIPPI'S MINERAL RESOURCES, page 1) is Acting Head of the Department of Resource-Use Education at Mississippi State College. The article printed in this month's issue is one in a series which Mr. Gaither has been preparing for use in off-campus work in Resource-Use education. The series of studies is appearing jointly in the Social Science Bulletin and in a publication of Mr. Gaither's department, Resource-Use Notes.

Gordon K. Bryan (DOES MISSISSIPPI NEED A HOOVER COMMISSION? page 6) is a member of the Department of History and Government at Mississippi State College. Last June Mr. Bryan received his doctor's degree at the University of California in Los Angeles. His dissertation was an intensive study of the problems of county government in Mississippi.

Augustin Magruder (DOES MISSISSIPPI NEED A HOOVER COMMISSION? page 6) is co-author with Dr. Bryan of the study on governmental reorganization in Mississippi appearing in this issue. Mr. Magruder has had extensive experience in the field of law, and he was at one time mayor of the City of Starkville.

Dewey M. McCain (HOW WE "REVISED" OUR CURRICULA FOR ENGINEERS AT MISSISSIPPI STATE COLLEGE, page 9) is head of the Civil Engineering Department at the college and a member of the staff of the Engineering and Research Station here. Last summer Mr. McCain served on the staff of specialists assisting the Interim Committee on the Mississippi highway program.

J. V. Pace (FARM ADJUSTMENTS IN THE DELTA, page 17) is leader in extension economics for the Mississippi State College Agricultural Extension Division.

The Social Science Council

John K. Bettersworth, head of the Dept. of History & Government, Chairman

Harold F. Kaufman, head of the Division of Sociology and Rural Life

Thurston Walls, head of the Department of Economics

William P. Carter, Professor of Sociology and Major Professor in Social Service Administration.

William J. Evans, Associate Professor of Government and Major Professor in Public Administration.

RELATED SOCIAL SCIENCE AGENCIES:

Department of Agricultural Economics, Robert J. Saville, head.

Department of Home Economics, Dorothy Dickins, head.

Department of Resource-Use Education, Lee B. Gaither, head.

The Social Science Research Center

John K. Bettersworth, Chairman

Harold F. Kaufman, Associate Chairman

The purpose of the Social Science Research Center is to stimulate coordination and cooperation among the Social Sciences at Mississippi State College and to provide for the expansion of research, graduate studies, and off-campus teaching in the social science field. Research and off-campus activity will be oriented toward the local and community level, with attention being directed to social, economic, political, historical, educational, and related problems.

The Center is organized around an Advisory Board consisting of one representative of each of the social science fields. The working staff will consist of one or more specialists in Social Science research and off-campus work, including community organization, and a consultative staff drawn from the faculty.

The Social Science Round Table

A cooperative activity in which social scientists and persons in related fields at Mississippi State College and neighboring institutions participate on a voluntary basis. Meetings are held at least three times each semester, and one of the social science departments at the college provides the speaker for each occasion. Announcements of program details appear regularly in the Bulletin.

The Social Science Bulletin

Published monthly by the Social Science Council of Mississippi State College; John K. Bettersworth, Chairman and Editor. All communications should be addressed to Box 148, State College. Office: Lee Hall, Room 206. Telephone: Starkville 900, Extension 264. News items and contributions are always desired. A deadline of the fifteenth of each month is maintained for the material to be included in that month's issue. Copies will be sent free of charge to anyone desiring to receive the Bulletin. A limited supply of extra copies of individual articles is on hand for distribution to any persons desiring to obtain them.

Volume III, Number 2 State College, Mississippi, March, 1950

page 1

MISSISSIPPI'S MINERAL RESOURCES: A Survey

by
Lee B. Gaither
Department of Resource-Use Education
Mississippi State College

Until oil was discovered in the state, the mineral resources of Mississippi received very little attention. Despite the discovery of rich deposits of clays, marls, limestones, sand, gravel, and mineral pigments by state geologists, the value of these resources was not recognized by the general public and no concerted effort was made to encourage mining and processing of Mississippi's mineral resources. The absence of metallic minerals of commercial importance was regarded as proof of nature's niggardliness in bestowing minerals upon the state. Some interest in discovering and developing the mineral wealth of the state was displayed during the 1930's when the state launched the "Balance Agriculture with Industry" program, but the attention of the general public was not aroused until oil was discovered in the Tinsley Field of Yazoo County in 1939.

Recent Production Trends

The rapid expansion of the petroleum industry during the last decade has caused a phenomenal increase in the value of the state's mineral production and a growing interest in the development of mineral resources. In 1939, the value of Mississippi's mineral products was only \$5,192,000.¹ Only nine years later, the value of all minerals mined and extracted reached \$95,300,000.² Within ten years, Mississippi has moved up to ninth position among the oil producing states. In 1946, the state ranked 28th in the total value of its mineral products, which was a stupendous gain over its position of 41st based upon the total production for the period 1911-1946. More than 3,500 workers were employed in mining and extracting minerals in 1949.³ These employees received nearly \$11,000,000 in salaries and wages in contrast with \$545,000 paid to 644 workers in 1939. The gains in employment and value of products were influenced primarily by the rapid growth of the petroleum and natural gas industries in the last decade. In 1946, oil and gas products constituted more than 90% of the value of all mineral products.⁴

1. Bureau of the Census, Statistical Abstract of the United States, 1949, Seventh Edition, Washington, United States Government Printing Office, 1949, 761.

2. The Blue Book of Southern Industry, 1949, Baltimore, Manufacturers Record Publishing Company, 1949, 121.

3. Ibid., 48

4. Bureau of Mines, Minerals Yearbook, 1946, Washington, United States Government Printing Office, 1948, 48.

Although it is probable that mineral fuels will constitute the major source of income for several years, Mississippi should not continue to overlook the commercial value of its rich deposits of clays and other minerals. In the long run, these baser resources may yield greater returns to the people of the state than gas and oil because the known reserves are capable of sustaining a sizeable industrial expansion for many generations. Of course, the soils of Mississippi will continue to be the major natural resource on which the economy of the state rests, but it is reasonable to expect that other mineral resources will play an increasingly important role in the industrial pattern.

Major Mineral Resources

The major mineral resources of Mississippi are petroleum, natural gas, lignite, clays, limestones, marls, bauxite, sand gravel, building stone, and mineral pigments. Less than a third of the counties have had a comprehensive geological survey. Consequently, the types, quality, and quantity of the mineral deposits in some parts of the state remain undetermined.

Clays are one of our most valuable mineral resources. More than a decade ago, V.M. Foster, a geologist, said, "Of all the known mineral deposits in the State, perhaps the least generally appreciated, and at the same time probably one of the most important and potentially valuable from the viewpoint of future industrial development, is clay."⁵ Although Foster's statement was made before the discovery of oil in the state, it is still true today. Few people realize that the value of clays and other nonmetallic minerals (other than the mineral fuels) produced in the United States is at least two-thirds that of the metallic minerals.⁶

Clays suitable for making brick and tile of good quality are found in nearly every county of the state and the numerous small plants engaged in making brick are able to supply the local demand. A recent directory of manufacturers indicates that most of the clay-using establishments limit their production to common red brick; however, a few firms produce tile and face brick.⁷ It is probable that insufficient terra cotta, vitrified brick, and roofing tile is produced within the state to supply the local demand despite the suitability of Mississippi clays for the manufacture of these products. Inasmuch as most of the brick and tile firms are small, they have neither the capital nor the facilities to carry on an extensive research program for the purpose of developing new processes or of discovering new uses for their products.

Refractory clays are used as linings for furnaces and kilns because of their ability to withstand exceptionally high temperatures. Large deposits of refractory clays are found in Tishomingo, Tallahatchie, and adjoining counties. Several pits near Enid were opened some years ago and the clays were shipped to northern markets. Bauxite, a highly siliceous bauxite clay, which is used for lining furnaces in the steel and glass industries, has been found in Tippah, Union, Pontotoc, Webster, Winston, and other counties of the state. The deposit south of Louisville in Winston County is similar to the refractory clays which other states have found profitable.

Bleaching clays are used extensively in industry for clarifying vegetable and mineral oils. Bentonite is the most promising bleaching clay found in Mississippi. Sizeable deposits have been found in several counties of northeastern Mississippi and in Smith County of South Mississippi.⁸ The Filtrol Corporation of Jackson is the chief domestic user of this product. Several land owners in the state have found that their bentonite deposits provide a regular income and the value of their land increased greatly after the deposits were discovered. Sufficient quantities of this mineral exist to justify an expansion of bentonite-using industries in the state.

Although several potteries have been established in Mississippi, the pottery clay resources of the state have hardly been touched. High grade pottery clays have been found in a narrow belt stretching from Benton and Marshall counties. Some of these pottery clays are suitable for making high grade table ware, sanitary ware such as tubs, sinks, and basins, art ware, and numerous other uses. Despite the abundance of suitable raw materials, it is doubtful that the pottery industry in the state produces enough articles to satisfy the domestic demand.

5. Mississippi State Planning Commission, Progress Report on State Planning in Mississippi, January 1, 1938, Jackson, Miss., The Tucker Printing Company, (no date), 102.

6. Bureau of Mines, Minerals Yearbook, 1946, 18.

7. McKinney, David, Directory of Mississippi Manufacturers, University, Mississippi, Bureau of Business Research, 1949, 67-68.

8. Progress Report on State Planning in Mississippi, 105.

Limestone and marls are as yet not adequately exploited. Although the state uses large quantities of cement and has ample supplies of high grade raw materials to make the product, not a single Portland cement plant is in operation in Mississippi. Suitable materials for making Portland cement have been located in the extreme northeastern corner of the state in the Selma Chalk belt extending from near Wayne County to Warren County.⁹

Adequate deposits of limestone needed for agricultural purposes are found in many areas of the state. Several quarries have been opened to meet the local demand which may be expected to increase because of the wide-spread use of limestone in solid improvement programs.

Bauxite, an ore of aluminium, exists in commercially significant deposits from Tippah County to Kemper County. Although ores from these deposits cannot compete with the higher quality Arkansas ores as a source of aluminum, the low-grade bauxite and the bauxite clays found in Mississippi are suitable for making refractory materials such as furnace linings and for manufacturing alumina cement.¹⁰ This resource has not been developed despite the opportunities that exist for marketing the products.

Ochreous clays which are pure enough to be used as paint pigments have been found in several localities including Tishomingo County and near Meridian.¹¹ Some ochre has been shipped to other states but little effort has been made to use this pigment in developing a paint industry within the state.

Mississippi has abundant deposits of sand and gravel distributed throughout most of the state to meet the local demand for road building and general construction materials. A large number of small plants are engaged in making cement blocks from near by raw materials. Although several deposits of sand have been suggested as possible sources of high grade quartz sand for making glass, the sands which have been discovered are not suitable for making high grade glass products. More research may reveal new deposits of high grade quartz sand and disclose commercial uses for the relatively impure sands which have been discovered.

Although some building stone is quarried in the state, it is improbable that the limited amount of suitable stone near the surface will exceed local demands. The Vicksburg formation which supplied stone for the Old Capitol has been the principal source of building stone. Further investigation is needed concerning the feasibility of developing deposits of ornamental stone near Bay Springs and of quarrying the Paleozoic limestones and sandstones of northeast Mississippi.¹²

One of the major handicaps which delayed the development of Mississippi's mineral resources for many decades was the lack of cheap fuel.¹³ Until natural gas and petroleum fields were discovered in the state, the only native fuels were wood and lignite. Since wood is not a satisfactory fuel for industry, other sources of energy were sought. Inasmuch as several promising deposits of lignite were found, several attempts were made to develop these deposits. Lignite is low grade brown coal which is high in moisture content. Therefore, it has been necessary to remove the water and process the fuel into briquettes, powdered form, or producer gas before using it. Special equipment is needed to burn this fuel in the powdered form. Although research studies show that the better grades of lignite are approximately equal to bituminous coal in energy output, the costs of processing this fuel and the necessity of installing special equipment to burn it economically has delayed its use. Current research at the Engineering Research Laboratory of Mississippi State College indicates that the better grades of lignite may be able to compete successfully with other fuels for some uses in the near future. The most promising beds of lignite are located in Wilcox-Claiborne formations of Lafayette, Calhoun, Webster, Winston, Holmes, and Madison Counties, but deposits have been found in at least 20 counties.¹⁴

The discovery of natural gas near Amory in 1926 and the subsequent opening of other fields in central and south Mississippi has provided the state with a bountiful supply of fuel for heating and for many industrial purposes. New fields are being discovered at frequent intervals; consequently, it seems probable that adequate reserves exist to fulfill anticipated needs for many years. Known reserves in 1946 totaled 10.9 trillion cubic feet which will be sufficient to supply the demand for 151 years at the 1946 rate of use.¹⁵ In 1946, gas production totaled 7,200,000,000 cubic feet, a gain over the war period but only half the 1939 production.¹⁶ Many wells produce wet gas or condensate from which petroleum products are extracted. An extensive system of pipelines has been laid to provide the cities and many of the smaller towns with natural gas from Mississippi wells. This fuel is contributing to the prosperity of the state by removing a former major handicap to industrial expansion.

9. Ibid., 106-107.

10. Ibid., 107-108.

11. Ibid., 109.

12. Progress Report of State Planning in Mississippi, 111.

13. Ibid., 110.

14. Mississippi Geological Survey Bulletin No. 24 (March 1933), 14.

15. Evans, Everett F., and Donahue, Roy L., Our South, Its Resources and Their Use, Dallas, The Steck Company, 1949, 105.

16. Minerals Yearbook, 1946, 48.

Since the discovery of oil in the Tinsley Field of Yazoo County in 1939, the petroleum industry has expanded into many counties of the central and southern sections of the state. Production in 1947 was 34,925,000 barrels.¹⁷ Little is known concerning the reserves because a thorough study has not been made of the geological formations in the state. Then, too, oil is where you find it rather than in all the places where the rock formations indicate that it might be found. Man has discovered no reliable substitute for the drill in locating oil bearing sands and pools trapped in the depths of the earth. Petroleum is not an economical fuel for industrial establishments which require high temperatures to process raw materials and fabricate finished goods. Consequently, Mississippi cannot expect this resource to attract a large number of heavy industries. However, it is reasonable to expect a considerable expansion in the number of refineries and related industries.

The Need for Wise Use

If the people of Mississippi are to realize the maximum returns from their mineral resources, action must be taken to prevent waste and misuse, to complete the geological survey of the state, to determine the feasibility and means of developing mineral deposits, to locate market outlets, to train ceramic engineers and other technical specialists, and to familiarize the public with the opportunities for launching profitable business ventures in the minerals development field. Until these measures are taken it is probable that Mississippi will obtain little benefit from her mineral resources other than oil and gas.

Conservation is our foremost problem. The most urgent need for conservation measures relative to mineral resources is in the petroleum and natural gas fields. Apparently, the policy of the State Oil and Gas Board has been based largely on the desire of the state government to obtain the maximum revenue from the severance tax. The quota system by which production of petroleum is prorated among the producers helps maintain a stable crude oil price level and the state benefits in the long run through greater severance tax revenue. However, many experts doubt that the prorata system is as effective in preventing waste as the more direct field unitization method. Under the latter method, the producers pool their interests, space the wells on their combined properties so as to obtain the maximum oil from the field, and share in the profits according to the acreage each owner or leasee controls. The unitization system eliminates the pressure of competition. Consequently, individual producers are no longer compelled to exploit their holdings as rapidly as possible in order to realize a reasonable return on their investment. More oil is recovered because the pressure can be maintained at a higher level and the rate of recovery is slower than under unrestricted competition. On the other hand, critics of unit production contend that it monopolizes the petroleum industry. Voluntary improvements in production and refining have reduced much of the waste which formerly existed in the industry, but only the people of the state can formulate public policy which plays an important role in determining how much oil can be recovered. It is urgent that the public policy of Mississippi concerning oil and gas production be reviewed before it is too late to take adequate measures to protect the people's interest in these resources.

Of utmost important is the state geological survey. Unless this proceeds at a faster pace than in the past fifty years, the survey will not be completed in this century. Lack of sufficient funds to employ needed personnel and to test materials has been the major cause of the slow progress of the survey. It is obvious that the state's mineral resources cannot be developed until they are located, and until the quality, quantity, and usefulness of each resource is determined. Several firms have refused to establish plants in Mississippi because of their inability to obtain detailed technical knowledge concerning mineral deposits in the state. Although the oil and gas industries may be expected to gather their own data, the state cannot expect industries which use less valuable resources to do their own prospecting. Since the cost of surveys is so great that individual private firms cannot undertake the necessary investigations, the state must assume this responsibility or forego the benefits of increased revenue for the state and more jobs and investment opportunities for the people.

Engineering research could well point the way to wise resource-use. Although a few studies have been made to determine the feasibility and means of developing the state's mineral deposits, these studies have been piecemeal and sporadic. A well equipped ceramics laboratory staffed by sufficient trained personnel is needed to carry on research in uses for Mississippi's clays. Cost studies should be made to ascertain the feasibility of developing known deposits of clay and other minerals. Additional research is also needed to discover new techniques for processing clays, glass sands, bauxite, and other minerals. A very limited amount of research on these problems is being done by the Engineering Research Station of Mississippi State College and the small ceramics laboratory located on the campus of the University of

17. Statistical Abstract of the United States, 1949, 791.

Mississippi. Until more information is available on the engineering phases of developing Mississippi's resources, it is probable that industrial expansion in mining, extracting, and processing minerals will be very slow.

Technical training in the use of mineral resources is urgent. No institution of higher education in the state offers adequate training in ceramic engineering. Consequently, qualified engineers are not available to supervise the engineering phases of ceramic industries. Until the state institutions respond to this challenge, local industries in the ceramic field cannot expand their operations very much and few new firms will be established.

Another phase of the problem is that of marketing. Small new industries must often depend upon selling their product on a market which already exists because they lack the staff and funds to create a new market. Some of the smaller firms in this state which are in the minerals field could expand their operations if they could find a larger market. Market research should reveal opportunities which have been overlooked. This opportunity for service constitutes a challenge to the institutions of higher education which have business research facilities.

Finally, public information is of utmost importance. Only a small percentage of the citizens in the state are aware of the wealth of mineral resources at their doorsteps. It is also probable that few citizens understand the problems of mineral conservation well enough to discharge their civic responsibilities for the wise use of these resources. Until our people are informed, they cannot take advantage of their opportunities to improve their level of living through making wise use of the state's mineral resources. The schools bear the responsibility for educating the younger generation concerning their opportunities and responsibilities, but other public agencies must help in the task of educating our adult citizens so that Mississippi's mineral resources may be used wisely for the welfare of all the people of the state.

FROM THE REPORT OF THE PRESIDENT OF THE SOCIAL SCIENCE RESEARCH COUNCIL FOR 1948-49

Perhaps the most important aspect of research within a university is intangible. Research creates a climate of intellectual inquiry, of seeking for new facts and new meanings; it reminds both students and teachers that horizons of knowledge are distant and the quest for truth is unending. It emphasizes the responsibilities and opportunities of intellectual labor. Above all, it stimulates the imagination of the investigator and calls upon what creativity the individual may possess. The teacher who must profess some knowledge of many things in facing his daily classes can find in his own intensive inquiry the satisfaction of standing upon the footing of special knowledge and competence that he has established through his own direct research efforts. Teaching, by its nature, is a process of giving and sharing. To remain vital it must be accompanied by fresh study, new inquiry, deeper competence. This does not ensue from continually transmitting the findings of others; it must be reinforced by original work, by contact with the sources within one's specialization, by reaching out into new areas of knowledge.

Viewed in the large, the situation confronting social science research can be summarized simply. There is need for a much broader operating basis so that social scientists may respond to the demands for the application of their knowledge by government and industry. This means the improvement of research training and a larger supply of competent practitioners as well as men with essentially research orientation. It means the strengthening of the research institutes already in existence in many of our major universities, and involves a more effective utilization of specialists whether in the colleges or in departments that have no formal research organization. Where appropriate facilities exist, much large-scale research is under way, frequently through contractual arrangements with public agencies. There are strong indications that the opportunities will be greater, rather than less, in the immediate future for such financial support.

Existing arrangements are not as satisfactory as they should be, either from the standpoint of getting needed research accomplished or of reconciling such services with the teaching responsibilities of the universities. There is no quick and easy reform generally applicable. A series of adjustments are needed, ranging from more stable financing and the development of appropriate administrative machinery to changes in faculty schedules, degree requirements, and wider fellowship and training opportunities. Most of the elements for a really important advance in social science within the next few years are present. There are many able men of proved capacity; there are many younger men of real promise. While some fields are further advanced than others, the record of achievement is encouraging and there are many research leads that deserve to be pursued. Few such leads have suffered in recent years from lack of some measure of financial support. However, research is not an activity that can be advanced simply through more organization and more money....The question is how to identify the individuals with ideas and the competence to produce significant results, and reward the best men.

Wider appreciation of the utility of the social sciences can help....The problem today, in relation to the public is how best to achieve not recognition so much as understanding of the Social Sciences.

DOES MISSISSIPPI NEED A HOOVER COMMISSION?

An Examination of the Reorganization Problem in Mississippi

by

Gorden K. Bryan and Augustin Magruder

Department of History and Government and
Consultants, Social Science Research Center.

The appearance last year of the findings of the Hoover Commission, which had spent months investigating the organization and functioning of the executive branch of the National government, has stirred up no end of discussion of this vital problem, not only at the national level but also at the state and local level. What does all this mean to the man in the street, or as we should say in Mississippi, the man in the furrow?

What Was the Hoover Report?

In its report the Hoover Commission undertook to give a clear picture of the structure and operation of the executive branch of the National government, and to make recommendations for reorganizing it as to increase the economy and efficiency with which it serves the people. Although all are not in agreement on just what should be done, almost everyone realizes that adjustments in the machinery of government must be made to enable it to meet successfully the test imposed upon it by the growing popular demand for services and by swiftly moving world events.

It is right that the people should look to their government for many services which only public authority can supply. But quite naturally the more the government undertakes to do for the people, the larger will the machinery of government grow, because more and more agencies and offices must be maintained to achieve these ends. Unfortunately, in the past, the creation of these agencies has not been well planned, and the result has been much unnecessary expense and inefficient operation. These were the evils that the Commission has criticized. It has also made recommendations for eliminating some unnecessary governmental agencies, combining others, and so arranging all of them that adequate supervision of their work by the President and Congress would be possible.

More specifically, the Commission's recommendations can be described as follows:

1. Limit expenditures as much as possible.
2. Reduce duplication and overlapping of functions and activities.
3. Consolidate activities of a similar nature.
4. Abolish services and activities not necessary for the efficient conduct of the government.

5. Define and limit executive functions and activities.

If these policies were used as general guides in organizing the executive branch of the National government, the Commission felt that the government would be able to render better service to the people without unduly increasing the cost to the taxpayers.

Do States Need Reorganization?

In recent years it has become widely recognized that the state governments suffer from much the same type of defects and lack of organization in their executive branches as does the National government. Many states have been encouraged by the work of the Hoover Commission to set up similar commissions with a view to carrying out reforms and reorganizations along the general lines of those recommended for the National government. Thus far, the legislatures of twenty-eight states, including the Southern states of Florida, South Carolina, Kentucky, Tennessee, and Texas, have set up "Little Hoover Commissions" to make surveys of the state executive branch in an effort to discover ways of reducing costs and increasing efficiency.¹ To the people generally it is encouraging to have their governors and legislatures indicate genuine concern for taking steps to render the state government more efficient and economical.

Within the past few weeks, the people of Mississippi have learned that their governor and legislators are not lagging behind either the National government or her sister states in the matter of governmental reorganization and reform. In his message to the opening session of the Legislature, Governor Wright recommended the appointment of a special legislative committee to make a thorough survey of the executive and administrative offices and agencies of the state and to recommend steps to be taken to give the State a more efficient, less costly, and more responsible administration.

¹. Other states are: Arizona, California, Colorado, Connecticut, Delaware, Idaho, Illinois, Iowa, Massachusetts, Michigan, Minnesota, New Jersey, New York, New Hampshire, Ohio, Oregon, Nebraska, North Dakota, Oklahoma, Pennsylvania, and Wisconsin.

No doubt, the legislative committee, when it is appointed and begins its work, will find the report of the Hoover Commission useful for helpful suggestions as to the most effective way in which to conduct its survey. The committee can also profit from the experience of similar committees in other states where surveys of this type have been made recently or are new in progress. It is not amiss, however, to point out several factors which are essential to the effective work of such a committee: (1) The Legislature should appropriate sufficient funds to finance the work of the investigating committee. Otherwise, the committee will not be able to do a worthwhile job. (2) The committee should be authorized to call upon specialists in the field of public management and organization for professional advice. Professional service can usually be obtained without appreciable cost and can add immeasurably to the value of the work of the committee. In fact, Mississippi already has such resources in the form of the Public Affairs Service which will operate as a function of the Social Science Research Center now being activated at Mississippi State College and the Bureau of Public Administration at the University. (3) It must also be emphasized that the people of Mississippi should be kept fully informed as to the findings and recommendations of the committee. Too often surveys of this kind come to naught because the reports of the findings and recommendations are not given adequate publicity and are allowed to be filed away in some office and forgotten. Essential to the success of any attempt at governmental reorganization and improvement is the support of the people. The citizens of Mississippi, if confronted with the facts regarding their state government and the need for improvement, can be counted upon to give such a program their support, because they realize it will mean for them more efficient service at reasonable cost.

Until such a survey as that recommended by Governor Wright has been completed, it is, of course, impossible to anticipate fully what the findings and recommendations will be. However, in 1930 the Brookings Institution made a very thorough survey of state and local government in Mississippi, and offered many valuable recommendations for improvement. Some of these proposals are doubtless out of date after the passing of twenty years, but this survey still has much that an investigating committee would find useful today. Meanwhile, the faculties and research facilities of Mississippi's educational institutions have been engaged as fully as financial support would permit in a continuous study of public problems. The fruits of this research should not be ignored, but rather such work should be encouraged to continue and expand its scope.

What Are Mississippi's Problems?

It might be asked at this juncture: What, in general, is wrong with Mississippi's executive and administrative organization? Mississippi suffers from many of the same defects as the National government and most of the states. Like the national and other state governments, Mississippi's executive and administrative branch has expanded in a hit-and-miss fashion. Boards and commissions and agencies of various types have sometimes been created without proper regard for over-all management and supervision, and the result is that today the State has over 100 different administrative agencies, some of which are not necessary at all, and others whose functions overlap and conflict.

At a conference in Chicago in September, 1949, participated in by representatives of twenty state commissions which were studying the organization of executive and administrative agencies of their states, it was generally agreed that first of all the governor must be in fact the chief executive—that he must be clothed with sufficient authority and given necessary tools of management with which to work. Through such a centralized responsibility the government of the state becomes more effectively responsive to the will of the people. The present situation in Mississippi finds practically every executive office and agency independent of any effective supervision by the governor. Yet the people of Mississippi, as do those of other states, tend to hold their governor responsible for efficient conduct of all the state's business. The existence of the conglomeration of offices and agencies which are not responsible to the governor in any effective way makes it almost impossible for the State to enjoy a well-managed, properly-conducted administration. Governor Wright recognized this situation recently when he said to the Legislature that he was willing to assume any responsibility which the people of Mississippi wish to impose upon him if they would give him sufficient authority to meet that responsibility.

To limit reorganization to readjustment of the administrative offices and agencies and their relation to the governor would probably result in only minor improvement. If administration of public affairs in Mississippi is to be made truly efficient and economical, steps should be taken to assure the people of the State that the hundreds of men and women employed by the State are actually qualified by training and experience. This can be done by establishing a civil service system through which qualified persons would be employed and properly supervised and managed. The legislative investigating committee would do well, therefore, seriously to consider recommending some type of public personnel management system. Other states have found such a system essential to the maintenance of a genuinely efficient and economical administration.

Shall We Revise Our Constitution?

In many respects Mississippi is more fortunate in approaching the task of administrative reorganization than some other states. This is true because the Mississippi Constitution leaves the Legislature more freedom in adjusting the agencies of government than do the more detailed and restrictive constitutions of some states, and some changes have already been made simply by statute. Nevertheless, in accomplishing a worthwhile reorganization, it will be necessary for the people of Mississippi to make some changes in their sixty-year-old constitution.

The present Constitution was adopted in 1890, at a time when public dependence on government was slight and public distrust of government was great. The Reconstruction government following the Civil War was a vivid memory; and Southerners had come to believe that by sharply cutting the powers of government, nobody could ever gain too much power or do too much damage. The past sixty years have shown, however, that these supposed safeguards were hindrances in many instances. Already, some improvements have been made from time to time by the difficult process of piecemeal amendment, and, as we have seen, the Legislature has taken some advantage of its power to effect changes by its own action.

But the entire administrative system - state, county, and local - requires modernization. Consequently, our Constitution needs modernization. General revision cannot be accomplished except through the medium of a constitutional convention, called for the specific purpose of providing the people with an up-to-date, efficient system of government.

Bills are pending in the 1950 Legislature looking toward such a constitutional convention. Naturally, opinions differ as to the best method of setting up a convention. Any convention plan, however, would be incomplete if it did not provide for (1) a preliminary study group analogous to the Hoover Commission, and (2) a publicity or educational campaign which would inform the people of the problems and possible solutions.

The study group, by whatever name called, would investigate such questions as these: (1) Should the governor be allowed to succeed himself? (2) Should some of our state-wide elective offices be abolished, or if continued, should they be combined with other related offices? In any case, should they be made appointive by the Governor, perhaps with the approval of the Senate? (3) Should there be some fixed limit - say 10 or 15 - in the number of executive departments? (4) Should the Governor have an advisory cabinet made up of the appointive administrative heads of these executive departments? (5) Should our present and future administrative agencies and boards be reorganized so as to fit into a unified administrative system? (6) Should the Governor be given substantial power in law-enforcement, with state-wide enforcement agencies under his direction? (7) Should our county governmental system be completely overhauled? Should several optional types of county government be authorized, rather than one uniform pattern, so that counties could operate under the type best suited to their needs?

These are but a few of the problems which would confront a convention. Fortunately, in most instances, other states have tackled these problems. Every other state in the Union is a laboratory of experimentation in government, and their findings Mississippi can utilize, accepting the good and rejecting the bad. Thus, a great variety of solutions could be made available for consideration by the Convention.

Change for change's sake cannot be justified. A new device is not necessarily a good device. Nor are beautiful theories of government of much account. Experience remains the best teacher. The fruit of experience cannot, however, become available without the creation of a study group whose task it is to collect, assimilate, and report its findings.

Finally, the practical men of a convention, elected by the people, could apply their good judgment to all recommendations presented. They would be the judges. And to the product of such judgment, the people of Mississippi could rightly look for a more economical and more efficient government.

SOME FEDERAL SECURITY AGENCY STATISTICS ON DEGREES CONFERRED, 1948-9

A study of degrees conferred in this country during the academic year of 1948-49 made by the Federal Security Agency (Circular No. 267, 1 March, 1950) shows the top ten in subject matter fields as follows: UNDERGRADUATE DEGREES: Business (61,624), Engineering (43,604), Education (37,765), English (14,926), Economics (11,536), History (10,628), Chemistry (9,132), Biology (8,275), Psychology (8,205) Agriculture (7,909). MASTER'S DEGREES: Education (13,828), Engineering (4,647), Business and Commerce (3,897), English (1,952), Social Work (1,907), History (1,700), Music (1,469), Psychology (1,455), Chemistry (1,427), Physical Education (1,122). DOCTOR'S DEGREES: Chemistry (749), Education (681), Engineering (360), Physics (266), Agriculture (232), History (228), Psychology (201), English (157), Economics (149), Theology (143). Omitted from this ranking were degrees conferred in composite Social Sciences, a factor which might well have altered the figures in the undergraduate field.

HOW WE "REVISED" OUR CURRICULA FOR ENGINEERS
at Mississippi State College
by

DEWEY M. McCAIN
Department of Civil Engineering

A revision of the engineering curricula at Mississippi State College which was begun in 1945, was completed in 1947, and the transition to the new course of study began with the fall semester of 1947-48. The revisions placed into effect ideas which had been talked about locally and nationally for several years, but which had not as yet been given a thorough trial. The methods by which these ideas were implemented and the results of more than two years of trial are described here. More properly it should be said "the methods by which these ideas are being implemented," since constant observation of procedures and results is manifestly necessary.

Quite obviously, engineering curricula result from processes of evolution, not of mutation. Their roots are bedded in the past and were, and are, nourished from both local and national (even world) sources. Therefore, the engineering curricula now in effect at Mississippi State College reflect the historical influences of the college and the territory it most effectively serves. On the other hand, each one of the Engineering Schools which are working together to provide engineering educational opportunities for students should be influenced in considerable measure by the recommendations of national organizations engaged in a study of the problem. But this does not mean that curricula and courses should be standardized.

A study of the curricula offered at Mississippi State during the past thirty years or more shows quite clearly the local influences at work as well as the national trends. An example or two will illustrate this fact. Mathematics decreased from 19% of the total requirements just before the First World War to 11% immediately afterwards, and has remained in about the same proportion since that time. The sudden drop resulted from higher entrance standards. This was a local problem, since the high schools of this area in a measure determine our college starting point in all fields. The social sciences amounted to 21% of the requirements in 1918, dropped to 12% in the middle and late twenties—"the get-rich-quick" era, and by successive steps in 1932, 1938, and 1946 have risen again to 21%. The emphasis on the social sciences before the First World War was probably an expression of local more than national trends. The rise from a low of 12% to the present ratio of 21% represents the national trend in engineering education, a trend, however, which did not require a major operation at Mississippi State because we had never gone entirely overboard on technology. These two examples are typical samples of the quite profuse information which had to be analyzed and digested in preparation for the revision which we undertook. There was no lack of statistical information. So much was available, in fact, both in our records here and in outside sources, that one could easily have become lost in the maze.

The Committee on Engineering Curricula at Mississippi State made its report to the Dean in the Spring of 1947. The following quotation from that report indicates the foundation stone for the study as well as the recommendations built upon it. In part, the Committee stated that

...a periodic study and revision of curricula is normal procedure. But in this case more was involved than routine revision. It has become necessary to design a group of curricula based on even broader foundations than previous ones—in line with the report of the Committee on Education of the Society for the Promotion of Engineering Education, and in line with the thinking of your faculty. This report recommended, among other things, that a minimum of 20% of the four-year program in engineering education be allotted to the study of the humanistic-social subjects. It also recommended that the four-year program be principally basic. Since these two were not in conflict with the policy which had been followed here in the past, our acceptance of them should be regarded as an extension rather than a change of policy. The general principles on which our work is based, then are:

(1) That the maximum possible amount of non-technical subject matter consistent with thorough engineering training should be included.

1. A five-year program was discussed but never received serious consideration. A five-year combined program in Business Administration and Engineering was instituted under the joint administration of the Deans of Engineering and Business. On completing one of these curricula the student is granted a Bachelors Degree in Engineering and a Bachelors Degree in Business Administration. A five-year curriculum in Electrical Engineering was also devised. In these curricula, however, engineering requirements are the same as for the regular four-year curricula.

(2) That the courses should be essentially basic and fundamental, with the how-to-do-courses limited to those required to demonstrate and enliven the fundamentals and to start our graduates in their professional fields.

For purposes of detailed study and design the curricula were divided into the following groups:

Mathematics
Physical Sciences
Social Sciences and Humanities
General Engineering
Departmental Majors

Individual studies were made by committees from the faculties of each of these groups. The staffs of the four major engineering departments coordinated the work of all their divisions but selected a general chairman from a somewhat neutral field (the dean of the Business School) to umpire and to expedite liaison between the engineering and social science staffs. In this work the Committee practically lost its identity, for the entire college staff did whatever seemed necessary to make a reasonable result possible. We received the complete and unreserved cooperation of the humanities group as well as of all other service departments. Possibly the fact that most of our meetings were held at night in the homes of the committee members, where no time limit existed and where coffee increased the informality, helped more than one might anticipate.

After the aforementioned sub-committees were organized, certain other control points were established, besides the two principal statements given above; namely, that (1) the Freshman year and most of the Sophomore year should be common to all departments, that (2) the humanities and physical sciences (except geology for the civil engineering students) should be the same for all departments, and (3) that the humanistic-social portion of the curricula should be built up in logical order just as rigorously as the technological groups.

A common freshman year reduces the amount of snap judgment made by engineering Freshmen and is, we think, a significantly valuable feature. In the Sophomore year we kept most of the requirements the same for the Major departments, but introduced into the second semester one or two engineering courses peculiar to each department. These courses serve at least two purposes: (1) They are test courses which introduce the students to some fairly difficult work in his chosen field. Frequently this work provides the uncertain student with sufficient information to cause him to change his objective earlier than he would if he had not been subjected to a specialized discipline. (2) They partially satisfy the student's desire to "get going" in his chosen field. (All engineering instructors know, of course, that the students come to school to study engineering!) In this connection, some consideration was given to the introduction of an Engineering Problems course, but this idea lost out mainly because we could not make two plus two equal three.

With regard to the sequence and continuity in the humanities and social studies, we have had enough experience to learn that "so many hours of this and so many of that" will not broaden a curriculum. We have by trial and error learned some hard lessons about teaching government, economics, history, and humanities. We therefore requested the social science group to work both amongst themselves and with the engineering faculty on the design of a logical sequence of courses, with prerequisites, extending throughout the four-year period. We were in complete agreement that the engineering courses should not be superimposed on a so-called foundation of cultural subjects. Not only sequences but course content and teaching methods were suggested which were possibly new to some of the staff, but no opposition was offered. In fact, as a result of the work done for the School of Engineering, the social science instructors tell us that they have adopted different approaches for non-social science "professional" students and for, say, history majors. Cross substitution of so-called similar courses (between history majors and mechanical engineering majors, for example) is not permitted. Furthermore, a subsequent demand from the Business, Science, and Agriculture Schools for a similar treatment of courses precludes the possibility of a drift back to "spot" courses or "classic" methods. The Government staff is not trying to make political science majors of our engineers, nor is the English staff concentrating its time on word four, line sixteen, page fifty-six of Chaucer's Canterbury Tales. We do not intend to imply that the sequence or position adopted for the humanities courses here is the only possible one. We do mean that the courses are arranged to fit the degree of educational age of the students and that all instructors teach their courses knowing about the subject matter of preceding courses and of those which follow. It requires a more mature mind to grasp the significance of economics or the humanities than it does Mechanics of Materials or the usual Sophomore mathematics course. The social science and humanities planners wanted for certain of their courses students with more educational experience than they had had when most of the humanistic material was given in the Freshman and Sophomore years. We therefore moved humanities to the Junior year and stopped scheduling Sophomores for it, and we moved economics to the Senior year, requiring Senior standing as a prerequisite. These courses require the strong foundation in basic English, history, and government obtained in the lower level.

The Committee report stated:

In this study it was recognized that the selection and arrangement of courses provides only a framework, and that subject matter and teaching procedures are vital considerations. We therefore tried to dig a bit deeper into the course content than had heretofore been the case, and not only to make every course productive but to coordinate all courses in such a way that the necessary differentiation required for teaching purposes would not leave the curricula cut into isolated segments. It is to be made clear that the course content now agreed upon is not fixed but it subject to the changes demanded by experience. We recognize that the inherent weaknesses of differentiation cannot be overcome by good design alone, but we believe that proper integration during the Senior year, together with well planned comprehensive examinations near the end of that year is probably our best method of overcoming these weaknesses.

The Committee further recommended that a permanent study committee be appointed to take its place.

We are now in the third year of the revised program. During the past year minor shifts of credit hours have been made in the interest of efficiency, and to correct certain errors in the original arrangement. No major changes have been made, nor are any contemplated, even though we do find ourselves working under a relatively tight schedule in some of our major fields. In many cases the pinch has resulted in more accurate definitions of minimum requirements for specific courses. We have found that custom or inertia had been the real basis for some procedures, and that closer study of just what is fundamental in a given course has permitted a more satisfactory arrangement of material and produced better work in shorter time. The preparation of detailed outlines of our key courses, made by each instructor involved and revised by the group, has helped a lot.

Not everything is rosy now, nor do we expect it to be. There are difficulties in the present arrangement just as there were in the former curricula. Some difficulties encountered in the revised curricula are:

(1) The credit to be allowed to transfer students for work done in social sciences and humanities at other institutions, especially Junior Colleges. We are put on the spot by requests for substitutions when courses with similar subject matter have been covered elsewhere, but in such sequence and in such a manner as (in our opinion) to prevent effective teaching. The final clincher in such arguments for credit is, "We even used the same text."

(2) The permanent study committee recommended was not appointed, and insufficient watch has been kept over the revised curricula. In some degree this lack of formal committee work has been made up by constant informal two-and-three-man discussions which have quite evidently kept the instructors thinking about the job as a continuing—not a completed—problem.

(3) Objections of the students that they were already being required to take too much "non-engineering" work and that the increase would delay further their "engineering" education. It is interesting to note that this sort of criticism has subsided during the past three years.

One reward of curricula revision which has not been mentioned heretofore should be emphasized. Even if the mountain should labor and bring forth a mouse insofar as major changes are concerned, the very act of a long and thorough curriculum study is compensation a-plenty. It brings together in relatively small and workable groups men of the staff who otherwise would not have an opportunity for straight-from-the-shoulder exchange of ideas. It results in academic by-products which could be obtained in no other way. It places a program on trial and forces a watchfulness over it which might not otherwise exist. It also brings into prominence the question of details. For instance, now that we have a good frame, what of the details to make it function properly? What of subject matter? What of minimum course content? What of teaching procedures? These are the vital questions about any curriculum, and once a reasonable agreement is reached on the design of the frame, they become paramount.

NOTE: Copies of the above article may be obtained from the office of the Social Science Bulletin or from the author. Readers are referred to the Mississippi State College Catalog, Vol. XXV (July, 1950), pages 113-125 for a detailed listing of each of the curricula in engineering at Mississippi State College. The socio-humanistic curriculum is as follows: Freshman Year: American Institutions (American Government; American Civilization); and two semesters of English Composition. Sophomore Year: World Institutions (World Civilization; Comparative Government). Junior Year: Humanities (two semesters). Senior Year: Fundamentals of Economics (first semester); Economics of Industrial Relations (second semester).

THE SWADDLING MONTHS:

Locating, Choosing the President, and Erecting the First Buildings of Mississippi A & M College

by

John K. Bettersworth

(Third of a series)

On April 11, 1848, at eleven o'clock in the morning, the board of trustees of the Agricultural and Mechanical College of Mississippi was convened for the first time by Governor Stone in the Senate chamber of the capitol. To this group Stone had appointed nine men, all of whom but one were apparently members of the Grange. The exception was General West, but since West had steered the college bill through the Senate, his sympathy with a farmer's college was unquestioned. Nevertheless, by the meeting of June, 1879, West had resigned and in his place J.Z. George had been appointed.² One of the most prominent Grangers on the board was Dr. D.L. Phares, of Wilkinson County, who had operated a school of his own in that area for some years, and was subsequently to become a professor at the college. A.M. Paxton, of Vicksburg took the place of Dr. Phares.³ Also outstanding in the Grange was Major T.C. Dockery, of Hernando, in the Delta County of DeSoto. J.M. Causey was also a Granger, a farmer and representative from the Southwestern county of Pike. Frank Burkitt, who became the secretary of the board, was a journalist and political leader who had been active in the Grange in Chickasaw County. Three others were members of the state House of Representatives and may have been members of the Grange also: Charles L. Gilmer, a lawyer from Madison County; Col. L.B. Brown, a farmer from Enterprise; and William B. Augustus, a Macon planter. Col. W.B. Montgomery, a Starkville planter and dairyman, completed the roster. After the location of the college had been chosen, Montgomery as the so-called "local trustee" was to wield a profound influence on the development of the institution.

The order of business for the first meeting was simple. First the oath of office to the new trustees was administered by Judge J.A.P. Campbell, of the State Supreme Court, whereupon the nine members forthwith drew numbers out of a hat to determine the length of their terms. That done, Dr. Phares was chosen to prepare a seal, and arrangements made to advertise for bids for the location of the college. Three newspapers were selected to contain the official advertisements of the board: the Chickasaw Messenger, Burkitt's paper, the Jackson Clarion, and the Pascagoula Democrat-Star. Offers of many other papers to run the advertisement free of charge were also accepted, and the board publicly requested "all papers friendly to our Agricultural and Mechanical interests throughout the State" to publish the notice.⁴

Naturally, the board was concerned with college finances, if any, so they next turned their attention to the support fund. Although the legislature had created the college in its 1878 session, it had failed to appropriate any monies for the operation of the institution other than the proceeds of the land scrip fund, the use of which was limited. The annual income from the land grant fund was about \$5,000, which could be used only for "support and maintenance."⁵ Moreover, while the Morrill Act had provided that as much as ten per cent of the total endowment might be expended for the purchase of lands for sites of experimental farms, the legislative enactment had made no mention of how this sum should be divided between the white and Negro schools. At any rate, the trustees demanded a report from the state treasurer on the condition of the land scrip funds; but, apparently unable to ascertain the extent to which they might use the money, they provided themselves with copies of the acts of Congress and the legislature bearing upon the college, and bravely passed resolutions making current expenses of travel, etc. "payable out of any funds belonging to the Agricultural and Mechanical College."⁶ Meanwhile, Col. Montgomery was appointed a committee of one to collect subscriptions of money for the college. By April, 1879 he had secured a total of \$3,102.50.

Deliberations as to the location of the college were scheduled to begin at a meeting of the Board to take place subsequently at Meridian, at the Governor's call. At that time bids would be opened and the board would then proceed to examine the proposed locations.⁷ The Meridian meeting was convened on July 24, by which time bids either formal or informal had been received from Winona, West Point, Meridian, Lauderdale, Macon, Starkville, Sessumsville, Aberdeen, Verona, Tupelo, Okolona, Corinth, Quitman, Mississippi City, Pass Christian, Summit-McComb, Crystal Springs, Sharon, Kosciusko, and Brandon.⁸ Among the facilities offered were the site of an orphans' home at Lauderdale Springs built by the Baptists after the Civil War. West Point at first offered a school building and lands worth \$37,500, or private and public subscriptions totaling \$30,000. Later the city offered subscriptions of \$26,000 or the erection of a \$20,000 building for the college in accordance with plans and specifications of the board. Aberdeen offered public and private subscriptions to the amount of \$16,515, part of which was later withdrawn, plus its Masonic High School building and grounds, with an additional thousand annually if the male white children of Aberdeen were taught in the college preparatory

1. Frank Burkitt to Stone, November 13, 1878, Governors Correspondence, Mississippi Archives, File E-146-A.

2. Minutes of the Board, June 11, 1879.

3. Ibid., October 5, 1880.

4. Ibid., April 11, 1878.

5. Lee, The A. and M. College, 4-5.

6. Minutes of the Board of Trustees, 1878, passim.

7. Ibid., December 14, 1878, April 3, 1879.

8. Ibid., April 11, 1878.

9. Ibid., July 24, 25, 26, 27, 28, 30, 31, August 1, 1878.

school. Verona came forward with the land and buildings of North Mississippi College with an additional cash outlay of \$4000. Okolona offered existing facilities also with additional funds amounting to a total of \$26,000. Subsequently Okolona offered to spend \$12,000 in improvements on the building on this property. Quitman offered Achusa Springs as a location for the college, the grant to include 160 acres of land and \$1000 in cash. Later the Quitman bid was enlarged to include a half interest in the Achusa Springs resort property of 40 acres, plus a half-section of land contiguous to the Springs, 100,000 feet of lumber, and 1000 brick. Moreover, the sponsors would petition the legislature to authorize Clark County to levy a tax of not less than \$2500 to be paid over to the college. Mississippi City, which thirty years before had failed by one vote to obtain the University, gave the choice of three separate plots of 160 acres each, two fronting on the Gulf, one on Biloxi Bay. In addition Mississippi City offered 100,000 feet of lumber for building purposes. McComb and Summit made a joint offer of a plot of 440 acres between the two towns, plus a cash outlay of \$6,000, a 2000 acre land donation, free transportation over the Chicago, St. Louis, and New Orleans Railroad of 2000 tons of freight for college use, half fare for students for ten years, and admission of students to railway machine shops at regular intervals. Sharon made a strong bid, which was revised until it included the buildings of the defunct Madison College and Sharon Female College plus additional property and cash. Meridian offered the choice of three tracts of land, apparently without buildings of any sort. Later, Meridian offered 520 acres of land one mile north of the city—160 acres on the eastern boundary of the city, plus \$5000 in cash.¹⁰

The railroads of the state manifested a lively interest in the location of the college. In fact the board subsequently passed resolutions of gratitude to the Mobile and Ohio; the Chicago, St. Louis, and New Orleans; the Vicksburg and Meridian; the Mississippi and Tennessee; and the West Feliciana for interest manifested by them "in the success of the A. & M. College."¹¹ Two of these roads, the Mobile and Ohio and the Chicago, St. Louis, and New Orleans, were highly commended for "special and extra accommodations." In fact, the Mobile and Ohio offered inducements for locating on its line by allotting a certain amount of freight to be transported free to charge and a cut-rate mileage charge for students, together with a donation of 160 acres of land.¹² The Chicago, St. Louis, and New Orleans made a similar offer, as we have seen, in connection with the joint bid of McComb and Summit.¹³

Before reaching a final decision the board determined to take to the road to examine prospective locations on the spot. The Mobile and Ohio forthwith provided a special train to accommodate the trustees, who spent three days visiting Verona, Okolona, Aberdeen, West Point, Starkville, Macon, Meridian, and Achusa Springs.¹⁴ All of these spots were in East Mississippi, an area which felt strongly that it should receive the college as opposed to central and West Mississippi, which were considered to have been served by the University at Oxford, which was on the railway traversing the western section from north to south and therefore accessible to people in the central and western section. Before acting, however, the board decided to investigate the bids along the Chicago, St. Louis, and New Orleans Railway, which was apparently bidding against the Mobile and Ohio with considerable vigor. Accordingly, on July 28 the trustees convened at Jackson, from whence they set out to visit Winona, Kosciusko, McComb, Summit, and Crystal Springs. Although visits to other places in the "western" area, including Sharon, in Madison County, were projected, the board subsequently changed its mind.¹⁵ Final action was postponed until September, but a Yellow Fever epidemic at Jackson prevented a meeting at that time.¹⁶ It was not, then, until December 13 that the trustees met again. By that time the field had become narrowed to a choice between Meridian and Starkville, although there was some interest still in West Point as a site. West Point was eliminated apparently because the college would have had to be located within the city limits and its facilities used by the city somewhat in the manner of a public school. Meridian seems to have lost out partly because of rivalry with Quitman, which was still anxious to secure the college for Achusa Springs. In fact, an article appeared in the Meridian Mercury, whose editor was said to have opposed the location of the college "in or near his home," praising the advantages of Achusa Springs on the ground that the moral environment of a city would be bad. The minutes of the board are silent on the point; but it is said that one member changed his vote after reading the aforementioned article, thereby giving Starkville the advantage.¹⁷ As one of the board members remarked later, Starkville was "a quiet country town, its people and community exceptionally sober and conservative, with a variety of soil."¹⁸

One version of the story places the responsibility for the choice of Starkville heavily upon Col. Montgomery. Montgomery was one of the strong members of the board; in fact he had been made president *pro tempore* on one previous occasion in the absence of the Governor.¹⁹ Many sources attest to the fact that Montgomery probably played up the moral climate of urban Meridian as one of the circumstances favorable to Starkville. He doubtless also emphasized the availability of soil for agricultural experimentation. At any rate, as we shall see, Montgomery's benevolent concern with the development of the agricultural feature of the college was more than adequate repayment to the state for any pressure he may have exerted to locate the college at Starkville.

Naturally, the choice of a spot in North Mississippi for the site of the farmers' college brought caustic remarks from South Mississippi. The Raymond Hinds County Gazette sourly remarked that it had been fearful that the college "would be placed in Tennessee or Alabama, but we are delighted to announce that Starkville is fully a dozen miles from the Alabama line and perhaps even a greater distance from the line of Tennessee."²⁰ The Gazette was also certain that the faculty would be chosen from Northeast Mississippi, Alabama, and Tennessee, in other words, the environs of Governor Stone, who lived in the northeastern Mississippi town of Iuka. The Brandon Republican blamed Stone with handpicking the trustees in order to give North Mississippi control, thereby assuring the location of the college "in the black belt, instead of in the section where the white boys live who were intended to be benefitted by it."²¹ Actually, Stone had been partially deterred from packing the board with men from his own neck of the woods by the requirement that each Congressional district be represented, a circumstance that would make for a fairly equal distribution of members. However, the governor had the privilege of choosing three members of the board from the state-at-large, and all three of these appointees were actually from the area

10. Ibid., July 24, December 13, 1878.

12. Ibid., July 27, 1878.

14. Ibid., July 24-27, 1878.

16. Ibid., September 10, 1878.

18. Ibid., 351.

20. Hinds County Gazette, January 3, 1879, quoted in speech by Dr. W. A. Evans to the Class of 1883 at its reunion in 1933.

21. Quoted in Chickasaw Messenger, February 3, 1881.

11. Ibid., July 31, 1878.

13. Ibid., July 24, 28, 1878.

15. Ibid., July 28, 30, December 13, 1878.

17. White, loc. cit., 351.

19. Minutes of the Board, July 28, 1878.

north of Jackson, although one was from Madison County, which might be technically included in the southern part of the state. Frank Burkitt, a northeasterner and a defender of Stone, insisted that in the voting the trustees did not adhere to sectional lines. In fact, both Burkitt and Stone had voted for Meridian;²² so Starkville won without the solid backing of the northerners.

A traveler who visited Starkville in the late seventies, described the town as such a "sprightly little city" that he could hardly believe his eyes. It had a railroad, the Mobile and Ohio, "connecting the place with the outer world." Later, however, he described the condition of the track of this branch line which ran from Starkville to Artesia as "abominable." The town had a telegraph "to flash market returns and the news at any moment." There were large brick stores "and plenty of them," all filled with goods, and a new brick courthouse was soon to be erected. Business was said to be six times as large and the population three times more numerous than in 1870. Apparently a campaign to secure immigrants, especially from the North, which was, by the way, a favorite scheme of Col. Montgomery, had succeeded well in the Starkville area, for Starkville was described as a port of welcome for the immigration agent of the Mobile and Ohio Railroad. The visitor was also impressed with the vast number of small farmers in the western hinterland of Starkville "who make their crop by their own labor and that of their families." The city itself had begun to experience a sort of real estate boom with the location of the farmers' college at Starkville, where there already existed a "female college" operated by the Rev. T.G. Sellers and an "excellent" school operated by a Mr. Tate (apparently a boys school whose operations were to be combined with those of the A. and M. College.).²³ As for religion, Starkville boasted churches of the Baptist, Presbyterian, Methodist, and Associate Reformed denominations.²⁴ Other denominations, including the Episcopal, were soon to enter the town.

In the early eighties the Winston Signal jealously counted Starkville's blessings:

Starkville can now boast of six and a quarter news-papers, published in the place, six churches, another about to be established, a female college, an A&M. College, one high school, three railroads, a very fine courthouse, some dozen ministers, a host of talented lawyers, a district attorney, a member of congress, two ex-chancellors, two ex-district attorneys, it is situated in the great Jersey cattle, blue and Johnson grass region of Mississippi, has the deepest mud and the hardest water to be found anywhere; and the most enterprising business men, and the prettiest girls (except Louisville, and West Point) and is altogether the most irrepressible town in this latitude.²⁵

The offer originally made by Starkville in bidding for the college was a total of \$12,980 in "private subscription and lands."²⁶ On December 13, 1878 the board appointed a committee to go to Starkville and select the lands to be used by the college. When the trustees met again in April, 1879, the committee had not acted; therefore the board undertook en masse to examine the prospective sites. The final decision was to purchase a plot of 350 acres known as the "Bell Tract," about one and one quarter miles east of Starkville. William Bell withheld his own 40-acre homestead temporarily, subject to use by the college. The plot was purchased at \$7.00 an acre, or \$2450.00. As for the lands donated to the college in the original bid for its location at Starkville, the amount is unknown, but Col. Montgomery was appointed by the board to dispose of them, and the manuscript records of the trustees contain a marginal comment to the effect that these lands were worth about \$500.00.²⁷

Some of the funds for purchasing land were apparently obtained from the interest on the land-scrip fund, which had begun to accrue to the college since January 1, 1878, and amounted to \$5,678.75 at the end of the first year. Apparently the legislature had actually intended to allot the A&M. College a sum equal to that originally spent for grounds at Alcorn, but as the entire principal of the land-scrip fund had already been invested in state bonds, the State Treasurer was unable to withdraw the ten per cent that might legally be expended on the purchase of a site, unless the legislature should make further authorization.²⁸

In the board meeting at Jackson in April, 1879, Dr. Phares was instructed to draw up plans for an administration and classroom building and submit the draft to a committee of which he was chairman. This group were to choose an architect, who should prepare the plans and specifications, whereupon advertisements for bids would be placed in the newspapers; then the full board would make a decision on the contractor.²⁹ Phares' committee met later in April and again in May, during which time Manser and Zucker of Vicksburg were given the architect's contract at five per cent of the final cost of the building. Later this firm was given an additional two and one-half per cent for supervising construction.³⁰ Eight bidders made offers ranging from \$13,633.67 to \$27,875.00. The lowest bid was that of C.M. Rubush of Vaiden, but the amount was increased to \$15,238.37 in order to embellish the structure with a 210 foot one-story gallery on the East and South sides. Such rambling galleries as this were a conspicuous feature of the "American Gothic" style popular at that time. This building, which was to be known as the "college" or "academic" building was to contain three stories and a basement. The basement was used by the Horticultural Department and the Carpenter Shops. On the first floor was the chapel room, said to be one of the largest in the state, and the office of the President and his secretary. On the second floor were the departments of Agriculture, English, and Mathematics and the Drawing Room. On the third story were the Preparatory Department, the mathematical instrument room, and the Entomology department.³¹

Although Rubush promised to have the building completed by January 1, 1880, construction did not actually begin until late in July 1879, and was still incomplete at the end of the year.³² An Executive Committee, which was destined to have profound influence on the operation of the college, supervised the construction work. This

22. Chickasaw Messenger, February 3, 1881. 23. Jackson Weekly Clarion, December 2, 1880. 24. Idem.

25. Southern Livestock Journal, April 6, 1882. The railroads were in addition to the M. & O. and I.C., the Georgia Pacific. At first this road used the M. & O. line from Starkville to Columbus, employing its own lines to Birmingham. At present this line is the Southern branch between Columbus and Birmingham, while the Mississippi portion of the line, the Columbus and Greenville, by-passes Starkville.

26. Minutes of the Board, July 24, 1878.

27. Ibid., April 3, 1879.

28. Ibid., December 14, 1878.

29. Ibid., April 3, 1879.

30. Ibid., June 12, May 16, 1879.

31. Catalogue, 1883-1884, 33.

32. Ibid., 42-47; Miss., Senate Journal, 1880, 27.

committee, consisting of Augustus and Burkitt, with Col. Montgomery as chairman, was soon acting in the name of the board in nearly every field of college activity. Since Col. Montgomery was on location, the role he was to play assumed considerable importance.³³

How the trustees proposed to pay for the academic building was an embarrassing question, for excepting the yearly interest on the land-scrip fund and private donations, there had been as yet no specific state appropriations. In December, 1879 the State Grange was profoundly disturbed over the dereliction of the legislature. In the Grange Meeting of December, 1878 Darden called on members to "impress" the legislature with the need for additional funds.³⁴ Again in the following year Put Darden lamented that A. & M. College had "had no endorsement or appropriations whatsoever from the State proper," and had received nothing for buildings, farms, apparatus, library, museums, or salaries. "The State," he said, "in justice to its own honor and material prosperity, and in justice to the agricultural, mechanical and other laboring classes should make a liberal appropriation at the next session of the Legislature for the purchase of land and erection of houses for Professors, boarders, and employees of the College. . . This will probably require \$125,000 to be used during the ensuing two years." Pointing out that such an outlay would be a permanent investment and would not have to be repeated every biennium, Darden also felt that additional money for salaries should be immediately appropriated, including \$12,500 annually for professors' salaries. Then, making comparisons, Darden pointed out that the University received \$27,000 annually for current expenses, while Alcorn had, at its founding, been provided with \$40,000 to obtain the Oakland College properties and had received \$50,000 yearly for three years plus the interest on the land-scrip fund. Darden urged that the legislators be assaulted with petitions sponsored by all the subordinate Granges. These petitions should include the names of "farmers, gardeners, mechanics, and all others who feel an interest in the building up of a great practical educational institution such as that in contemplation," where there would be offered "free of charge, a practical scientific education to every son of Mississippi, however poor."³⁵

Meanwhile, on December 4, 1879, the Board of Trustees had set up a committee to memorialize the legislature on the subject of appropriations. In the following January the Trustees requested an outlay of \$100,000 for the biennium of 1880-1881 "to enable them to place the enterprise in successful operation," and the committee was authorized to draft a bill for presentation. Stone in his message to the new legislature was also insistent upon the appropriation of funds so that the college might "soon become an honor to the State, and a blessing to the industrial classes of Mississippi."³⁶

After considerable discussion, a bill was approved on February 28 appropriating funds to the tune of \$50,000 for the fiscal year 1880 and \$35,000 for the fiscal year of 1881. The only recorded vote on the appropriation was in the House of Representatives, where the ayes were 67, the nays 23, with 30 absent or not voting.³⁷ The grant was \$52,500 short of the demands made by the State Grange.³⁸ The funds were to be used to make "improvements on and additions to said college, and for the purchase of books and maps and apparatus, live stock and farming implements."⁴⁰ A rider of some significance was originally attached to the appropriation bill by the House of Representatives, but apparently ruled out by the Senate, to the effect that "during the vacation the Professors of the College shall address the people of the State upon such subjects and at such times and places at the Trustees may require."⁴¹ Such a scheme was doubtless promoted by the Grange, which in the person of Put Darden had a peripatetic lecturer of its own; and, as we shall see, it was to be only a few years before the lecture idea was to be established as a part of the college program in the form of "Farmers Institutes."

At last provided with funds, the board proceeded to arrange for the additional buildings. The dormitory, a three-story structure of 115 student rooms capable of housing 250 men, was not ready for occupancy until the spring of 1881, at which time students began to move in gradually as the work was completed.⁴² On the main floor of the dormitory building were the post office, guard room, and armory, together with a number of student rooms, while in the basement were housed the library, the museum, the writing room, the drafting room, the oil room, and the classroom of the professor of biology.⁴³

By the end of the year 1883, a mess hall with a second story allotted to the literary societies, had been completed. There were also a one-story hospital, a brick home for the president, nine residences for the faculty and other staff members, a house for the "farm hands," a barn, two cattle sheds, an engine house, and a number of minor structures. Just completed was a two-story chemical laboratory, with a lecture room for 75 students and a number of laboratory and work rooms of various types.⁴⁴ Some damage to the campus had occurred during a tornadic storm in the autumn of 1883, and Zucker had supervised the repairs.⁴⁵

The work of landscaping was somewhat slow. Dr. Evans recalls that much of the time of the student labor squads was spent in clearing the drill field, and the annual reports of the professor of horticulture show that considerable effort was expended by the students in making the campus presentable. Apparently, the original ground-scheme was prepared by Adolph Zucker, the architect, who remained on the campus for some years as instructor in drawing. It was probably Zucker who was described by a visitor in December, 1880 as the "accomplished expert" who was to lay off the grounds around the college buildings with "walks, and an Avenue to town, the sides to be planted with all manner of native trees indigenous to Mississippi," so that in time the campus would be one of "the most beautiful College grounds in the South."⁴⁶

Ultimate responsibility for the grounds lay of course, with the President, and in November, 1882, the trustees charged Lee to adhere to the plan laid off by the architect.⁴⁷ The professor of horticulture ordinarily seems to have been held accountable by the president for much of the actual detailed work. Also, those jacks of all administration, the Executive Committee of the board, were often involved in matters of campus maintenance. In June 1883, it was this group that was ordered to have the grounds levelled preparatory to landscaping, "when the Money is in sight" and when "in their judgement [sic] they deem best." In July of that year the college steward

33. Minutes of the Board, May 16, 1879.

34. The State Grange and A. & M. College, 2.

35. Columbus Patron of Husbandry, December 27, 1879.

38. Mississippi, House Journal, 1880, 408-409.

36. Minutes of the Board, December 4, 1879, January 23, 24, 1880.

40. Mississippi, Laws, 1880, 198-199.

37. Mississippi, Senate Journal, 1880, 27-28.

42. Minutes of the Board, March 27, 1881.

39. The State Grange and A. & M. College, 3.

44. Ibid., 33-34.

41. Mississippi, House Journal, 1880, 333.

46. Jackson Weekly Clarion, December 2, 1880.

43. Catalogue, 1883-1884, 34.

45. Minutes of the Board, March 18, 1884.

47. Minutes of the Board, November 20, 1882.

undertook supervision of the grading.⁴⁸

Apparently the first specific instructions as to landscaping given by the board were to "have the grounds in front of the College Buildings set in Bermuda grass" and to plant this type of grass also in the permanent pasture.⁴⁹ Although in May, 1883 Professor J.J. Colmant, who had taken over the horticultural work of the college a year previously, was scolded by the President for neglecting the appearance of the campus, it would appear that by the autumn of that year Colmant had made some progress. "We are laying off the grounds around the College," wrote Colmant, "and will ornament them as far as our very limited means will reach." Also, by this time the campus was deemed presentable enough to spend \$75 for the making of "photographic views of the College and grounds."⁵⁰ In the following year Dr. Walker was paid \$50 for "laying off roads, etc."⁵¹

Although the construction of buildings was undertaken early, no move toward the choice of a president was made before the April meeting of 1879, at which time L.B. Brown was selected as a committee of one to "correspond with presidents of the various A. & M. Colleges in the United States, for the purpose of getting the names of suitable persons, from among whom we may select a president for this Institution."⁵² Aspirants had by no means been lacking, however. In December Thomas L. Gathright, who had at one time operated a sort of normal school of his own in Mississippi and had since become president of Texas A. & M. College, informed Governor Stone that he was available.⁵³ On June 21, the Columbus Patron of Husbandry, the official organ of the Grange, was singing the praises of Gathright, not, however, without mentioning favorably a Columbus Granger, Stephen D. Lee. However, the darling of the Patron was J.W.A. Wright, a Grange leader in California.

At board meetings in June and December, 1878 and again in January, 1880 no further action was taken, except that at the last meeting the trustees announced that at their next meeting a president would be selected.⁵⁴

Not until April 1, 1880 did the board reconvene. At that time the applications of five men were presented to the board by the Governor: The Rev. J.F. Freeman, of Starkville; Professor George M. Edgar of Anchorage, Kentucky; Professor William Richardson of Sherman, Texas; Professor Thomas S. Gathright, of Texas A. & M. College; and General Daniel Ruggles, of Fredericksburg, Virginia. Burkitt added to this list the applications of Professor John W.A. Wright, who had been specially favored by the Grange, and Professor R.C. Morrison, of Kentucky. Dr. Phares offered the name of Professor G.S. Roudebush, of Crystal Springs. How the name of General Stephen D. Lee was introduced is not known. The minutes of the Board merely record that Lee was presented as "a suitable person for the presidency of the College." By some means not explained in the minutes, the board narrowed the field to Roudebush and Lee, the latter winning by a 6 to 3 vote, only Brown, Dockery, and Causey voting for Roudebush.⁵⁵ Roudebush was given the consolation of being made "one of the professors" by a vote of 6 to 3, the Governor, Secretary Burkitt, and L.B. Brown voting negatively. Upon being called before the board to express his preference, Roudebush chose the English Department, of which he was forthwith made head.⁵⁶ Both Roudebush and Lee were asked to stand by at the next meeting of the board, and Lee himself was encharged with other duties pertaining to the opening of the College. How Lee proceeded in this work will be the theme of the next chapter.

By 1880, then, the college was beginning to take shape. For two years the Trustees had struggled without funds, not to nurture their child but simply to prevent a stillbirth. Until the legislature came forward with funds in 1880 what building the trustees had undertaken was on hazardous grounds, and the choice of a president and professors had had to be postponed. At last, however, even though appropriations were not as much as desired, an end had come to the two years of making bricks without straw, or rather of making buildings without bricks. Now the campus was a-building, and with the president chosen, the work of administration was ready to begin. At last Darden's "farmers, gardeners, mechanics, and all others" were about to receive "free of charge" their hoped-for "practical scientific education."

Meanwhile, interest in the new college had been mounting, and a query directed to the Jackson Clarion in May, 1880 called upon that paper to obtain and present to its readers information as to the date of opening; the "occupations" to be taught; the amount of labor and study per day to be required; the entrance costs; the degree, if any, to which the State would furnish rooms, board, bedding, etc.; and the possibility of a man's being allowed to "enter now and get business of some kind to do until school opens."⁵⁷

The Board of Trustees themselves issued a circular in May purporting to answer the multifarious questions that were being asked. Details of admission requirements, courses, student labor, and the various fees to be charged were outlined, and emphasis was placed on the fact that facilities would not be completely ready when the college opened in October.⁵⁸ About two months later, General Lee, by order of the board, issued a supplementary statement giving further details on the course of study, fees, and work requirements, particularly the self-help angle of the labor program. Counting the renumeration given for labor, Lee estimated that a young man could attend the A. & M. College for an entire year at no greater cost than \$75 to \$100!⁵⁹ The amazing thing about all this is that somehow or other there were always a few young men who could do it!

48. Minutes of the Board, October 16, 1882; June 20, July 3, 1883.

49. Ibid., March 18, 1884.

50. Lee to Colmant, May 24, 1883, President's Letter Book; Biennial Report, 1883, 39; Minutes of the Board, March 18, 1884.

51. Ibid., June 19, 1884.

52. Ibid., April 5, 1879.

53. Gathright to Stone, December 6, 1878, Governor's Correspondence, Miss. Archives, File E-146-A.

54. Minutes of the Board, January 23, 1880.

55. Minutes of the Board, April 1, 1880.

56. Ibid., April 2, 1880.

57. Jackson Weekly Clarion, May 19, 1880.

58. Jackson Weekly Clarion, May 26, 1880.

59. Jackson Weekly Clarion, July 21, 1880.

MARGARET REID ADDRESSES ROUND TABLE

The March 20th meeting of the Mississippi State College Social Science Round Table will bring to the campus a famous specialist in consumption economics, Dr. Margaret Reid, who is professor of economics in the School of Commerce at the University of Illinois. Dr. Reid is to speak on the timely subject, "Some Observations on the Effect of Price Support on the Consumer." The meeting is a dinner affair, at \$1.25 per plate. The place is the College Cafeteria. The time is Monday evening, March 20, at 6:30. Reservations may be made until noon, March 18th, by writing or telephoning Dr. J. K. Bettersworth, Box 148, Telephone Ex. 264. The departments of Agricultural Economics and Home Economics are joint sponsors of the meeting.

Dr. Reid is eminently qualified in her field. She has served with the U.S. Bureau of Human Nutrition and Home Economics as head of its Family Economics Division and on the Mitchell Committee on the Cost of Living. She has also written a number of books, among these being Economics of Household Production and Food for the People.

PHI ALPHA THETA CHAPTER TO BE INSTALLED

The Gamma-Nu Chapter of Phi Alpha Theta, national honorary history fraternity, will be formally established at Mississippi State College on March 27 in a round of activity that will involve installation ceremonies for the chapter, initiation of new members, and a banquet at the Gilmer Hotel in Columbus. Dr. Philip Hoffman, of the University of Alabama, who is national councillor, will be the installing officer, and members of the chapters of M.S.C.W. and the University of Alabama will participate. Dr. H.S. Snellgrove, who became a member of Phi Alpha Theta at the University of New Mexico, is faculty adviser of the fraternity, and its charter members will include: John W. Hadskey, President; Julian R. Long, Vice-President; Martha Swain, Secretary; Sarah Ratliff, Treasurer; Jimmy Bragan; Bernard Coggins; Mrs. Claude Jackson; Mrs. Juanita Meaders; Raymond Rhodes; Mrs. Irene Sawyer; John Southward, Jr.; Mrs. Tina Sproles; Hazel Walters, John K. Bettersworth; Glover Moore; Robert A. Brent; and James H. Molendon.

Phi Alpha Theta is open to students in the undergraduate school who have completed twelve semester hours in history with an average of B plus, together with an average on B in at least two-thirds of the remaining work. Graduate students must have completed at least 30% of residence courses with 30% of the grades being A, 60% being B, and not more than 10% being C. The above are the minimum requirements.

FARM ADJUSTMENTS IN THE DELTA
(continued from page seventeen)

Acres of wild winter peas for grazing, soil improvement, and seed; 100 acres of alfalfa for hay; 200 acres of lespedeza for hay; and 35 acres of red clover for grazing. Naturally cotton was the major source of income under the adjusted program. However, \$8,251 worth of oats, soy beans, wild winter peas, and red clover seed were sold. Beef cattle and sheep were the livestock enterprises added to the reorganized farm program. In 1948 the farm had 390 beef cows and 100 ewes. In addition 300 head of stocker cattle were bought, grazed, and sold. Fifty-five cows, 303 calves, and 65 lambs were marketed in 1948, in addition to the 300 head of stockers. Total value of livestock sales, figured at 1941 prices, amounted to \$19,238.

Under this balanced system of farming and with improved practices, total gross value of cash sales in 1948 was \$43,190 more than in 1937, using 1941 prices for both years to eliminate the effects of price differentials.

What these Studies Indicate

These case studies of actual farms where adjustments have already been made over a period of years indicate several important things that Delta farmers might consider carefully in trying to make adjustments in their farm business to best utilize all their productive resources of land, labor, equipment, and capital. Among the important points are (1) cotton will still remain the most important source of income on most Delta farms, (2) major adjustments on most Delta farms must be made gradually over a period of years as finances and time permit changes to be made and, most important of all, as management learns how to make sound adjustments and how to manage the reorganized farm efficiently, (3) sound land use and enterprise adjustments are feasible on small farms as well as on large plantations, although alternative decisions may be more limited, (4) livestock production will fit into many Delta farm organizations by utilizing land taken out of cotton and land not suited to row crop production for feed and grazing creeps, (5) small grain and seed production as supplementary cash crops will fit into the program of many Delta farms, (6) a balanced farm program will help to lessen the shock of a poor cotton crop such as was experienced by most Delta farmers last year, (7) sound land use and enterprise adjustments will make for a more permanent agriculture in the Delta, and (8) they will increase farm income and bring more than one pay day to the farmer.

The three farmers we have studied did not wait until the cotton acreage allotment and marketing quotas were forced on them to begin making adjustments to meet the present situation. They started years ago to do the things that most farmers are now debating whether or not to start doing. As a result they are in better position to meet the present and future situations whatever they may be.

EXTRACTS*Farm Adjustments in the Delta*ABSTRACTS

by
J. V. Fuce
Agricultural Extension Division

NOTE: The following abstract is from a bulletin issued by the Mississippi State College Agricultural Extension Division on March 8, 1950. The study was based on a joint survey of selected farms in the Mississippi Delta by the Departments of Agricultural Economics and Rural Sociology, and the Extension Agricultural Economics Division, State College, Mississippi.

A case study of selected farms in the Delta during the summer of 1949 shows that many farmers in the Delta can have a better balanced farm business and increase income by adjusting from a strictly cotton economy to a cotton - grain-livestock economy. The study showed that small farmers can make adjustments and have a better balanced farm business as well as larger farmers. The 12 farms selected for the study ranged in size from 72 acres to about 2,500 acres.

The land use, cropping system, crop and livestock production, and gross cash income on a small, a medium, and a large farm in 1948 after adjustments had been made are compared with a typical year before the adjustments were made. In order to eliminate the effects of price differences and inflated war and post-war prices, the gross income figures were arrived at by using average 1941 Mississippi farm prices for both years in the comparisons.

Adjustments on the Small Farm

On a small 72-acre farm cotton was the only source of cash income in 1941 except for \$143 from the sale of two small calves and four pigs. The cropping system in 1941 consisted of 20 acres of cotton, 14 acres of corn, 10 acres of soy beans for hay, and 6 acres of alfalfa. The average cotton yield was 300 pounds per acre. The corn yield was 15 bushels per acre. Livestock numbers were 2 cows, 1 sow, and 50 hens, all for home use. Total sales that year were \$1,459.

In 1948, after 7 years of farm business adjustments and improved practices, cotton yields increased to 700 pounds per acre and corn yields increased to 70 bushels per acre. Cotton acreage was increased to 30, and corn acreage was reduced to 8. Six acres of oats were added, yielding 77 bushels per acre. Thirty acres of wild winter peas were grown for soil improvement. Eight acres of idle land were put to productive use. The open pasture was increased from 7 to 11 acres, all of which was improved.

Livestock numbers were increased to 3 cows and 6 breed sows. Three calves and 52 hogs were sold for \$1,082. Total value of crop sales amounted to \$5,019, making total value of sales from crops and livestock of \$6,101, figured at 1941 prices. Instead of cotton being the only cash crop as in 1941, sales were made in 1948 from 6 acres of oats harvested for grain and from 2 acres of truck crops.

Adjustments on the Medium Size Farm

On the medium size Delta farm consisting of 640 acres, the farm business was completely reorganized over a period of 15 years. In 1934, 400 acres were in row crops, 350 acres in cotton, and 50 acres in corn. Other crops were 40 acres in alfalfa and 10 acres in garden and truck. Thirty acres were in open pasture and 100 acres were in woods. Idle crop land, house sites, roads, and waste took up 60 acres. Livestock population consisted of 1 sow and 30 hens. Cotton was the sole money crop except \$68 received for 4 pigs. Under this system of farming the gross value of sales in 1934 was \$11,643, figured at 1941 prices.

By 1948 row crops had been reduced to 250 acres. Broadcast crops had been increased to 225 acres, and open pasture to 135 acres. Woodland was reduced to 15 acres and idle or other land was reduced to 15 acres. Cotton acreage was reduced from 350 acres to 235 acres. Cotton yields increased from 150 pounds average in 1934 to 420 pounds in 1948. Corn acreage was cut from 50 acres to 15 acres, and yields were doubled. Alfalfa acreage was doubled. Twenty acres were planted to oats and 20 acres to sorghum silage. Sixty acres of Kudzu and sweet Sudan were grown for summer grazing. Wild winter peas were planted on 230 acres for grazing, soil improvement, and seed production. The pasture was fertilized, and seeded to adapted clovers and grasses. Beef cattle and hogs were added to the farm business. In 1948 the farm had 50 beef cows and 15 breed sows. That year 35 calves, 10 cull cows, and 100 hogs were sold.

Gross value of sales in 1948, again figured at 1941 prices for purposes of comparison, amounted to \$26,594, compared with \$11,711 in 1934. Instead of only one source of income as in 1934, there were 5 in 1948, divided as follows: cotton and cotton seed, \$22,175; alfalfa hay, \$720; wild winter peas, \$100; beef cattle, \$1,905; hogs, \$1,644.

Cotton still remains the major enterprise, but it is well to note that this farmer is doing a more efficient job of producing cotton. He produced nearly twice as much cotton in 1948 on 115 less acres than in 1934, and got nearly twice as much for it, figured at the same price per pound for both years. His livestock program is still expanding as his cotton acreage is being reduced.

Adjustments on the Large Farm

On the large Delta farm, consisting of 2,468 acres, cotton was the sole source of cash income in 1937. In fact three crops made up the entire cropping system that year—cotton, 1,800 acres, corn 180 acres, and soy beans for hay 180 acres. Open pasture consisted of 100 acres, and 183 acres were in woods pasture. No productive livestock was kept except a few for home use. Total gross value of cash sales in 1937 was \$118,422, figured at 1941 prices.

During the succeeding 11 years this farm underwent major adjustments in land use and farm organization. By 1948 row crops had dropped one half, total crops had dropped 30 per cent, and open improved pastures had increased from 100 acres to 750 acres. Sources of cash crops income had increased from one in 1937 to five in 1948. These included cotton and cotton seed, oats and oat straw, soy beans, wild winter peas, and red clover seed.

Cotton acreage was reduced from 1,800 acres in 1937 to 800 acres in 1948. Cotton yields increased from 300 pounds to 766 pounds. Corn acreage was increased slightly, and the yield per acre was doubled. New crops added to the cropping system included 350 acres of oats for grazing and grain; 60 acres of soy beans for grain; 1,050

(Continued on page eighteen)

SOCIAL SCIENCE RESEARCH CENTER ORGANIZED HERE

A Social Science Research Center has been set up at Mississippi State College for the two-fold purpose of encouraging research in the Social Science field and for promoting off-campus activities whereby the services of the Social Science agencies at the college may be made available at the local and community level. The Social Science Research Center is designed to give an outlet not otherwise available at the college for research and off-campus work. The Center will, however, seek to work in cooperation with all other agencies in research and extension now functioning at Mississippi State. Dr. J.K. Bettersworth, head of the Department of History and Government and chairman of the Social Science Council, is serving as chairman of the Center, and Dr. Harold F. Kaufman, head of the Division of Sociology and Rural Life (embracing the academic, experiment station, and agricultural extension fields) is associate chairman. The organization includes an Advisory Board with one member from each field cooperating and a staff of consultants drawn from social science and related departments. Eventually there will be a permanent staff directly attached to the Center for the coordination of research and the carrying on of off-campus activities. The program of the Center will be directed largely toward the local and community level, where it will deal with social, economic, political, and related problems. Matters of community organization, civic improvement, and local governmental problems will be of major concern. Since Mississippi State College by its very nature and purpose has both by tradition and by practice functioned as a people's college, the establishment of the Social Science Research Center is an inevitable, if belated step, toward the fuller realization of that goal.

DEAN WEEMS CONTRIBUTES TO HISTORY OF NAVAL AVIATION

Dean R. C. Weems, of the School of Business and Industry, who served as Lt. Comdr. in the Naval Aviation branch during World War II, is one of the contributors to The History of United States Naval Aviation, which has just been published by the Yale University Press. Captain Archibald D. Turnbull, deputy director of naval records and history, and Lt. Comdr. Clifford L. Lord, former head of the naval aviation history unit, directed the writing of the history. Dean Weems' contribution was as a member of the aviation history unit during World War II. Dean Weems, together with Lt. Comdr. R.M. Carrigan and Lieut. T. A. Miller, prepared a monograph on "Aviation Personnel 1911-1909," portions of which study were used in the preparation of The History of United States Naval Aviation.

GRADUATE REGISTRATION IN THE SOCIAL SCIENCES CONTINUES TO GROW

Dean Herbert Drennon reports that there is a total enrollment of 233 graduate students for the current semester. A large number of these are in the social sciences and related fields. Of the total 25 are in history, 15 in economics, 14 in agricultural economics, 5 in sociology and rural life, and 3 in government and public administration. Of the above numbers there are 9 majors in history, 7 majors in agricultural economics, 2 majors in sociology, 2 majors in economics, and 2 majors in government. In fields related to the social sciences, there are 65 either majoring or minoring in the various branches of education, 13 in various branches of business, and 3 in English.

The graduate students in agricultural economics are: Jackson M. Brown, Starkville; Daniel R. Bryan, Carrollton; Aubie C. Davis, Coldwater; Marshall S. Dickerson, Jr., Sallis; John E. Garretson, Laurel; William E. Hall, Starkville; T.V. Majure, Utica; J.W. Marshall, Enterprise; A.D. Seale, Jr., Roxie; T.E. Tramel, Raleigh; J.C. Treloar, Raymond; J.H. Treloar, Clinton; J.S. Ware, Leland; and J.H. Webb, Denmark, Miss.

The graduate students in economics are: Rex R. Benson, Meridian; Daniel R. Bryan, Carrollton; Winton Cain, Perkinston; Aubie Davis, Coldwater; Marshall Dickerson, Jr., Sallis; Jack Francis, Amory; William E. Hall, Starkville; T.V. Majore, Utica; Elman D. Jackson, Sturgis; Allen Pryor, Forest; A.D. Seale, Jr., Roxie; N.N. Snapp, State College; C.J. Talbert, Louisville, T.E. Tramel, Raleigh, and Mrs. Nell Wofford, State College.

Graduate students in sociology include: Dallas Johnson, Maben; Robert Latham, Eupora; E.H. Tucker, Union; Merle Davis, Starkville; E.E. Stidham, Coffeeville.

Government graduate students are: Paul O. Beard, New Albany; Winton Cain, Perkinson; and Sarah Ratliff, Learned.

Graduate students in history include: J.T. Martin, Starkville; Sterling Bryant, Hattiesburg; B.H. Coggins, Baldwin; C.R. Durham, Collins; D.L. Dunaway, Tylertown; John W. Hadskey, Roxie; H.L. Harbour, Union; Annie Kate Jackson, Starkville; Dallas Johnson, Maben; R.C. Latham, Eupora; C.J. Ramsey, Birmingham; J.L. Raper, Hackleburg, Ala.; Sarah Ratliff, Learned; Irene P. Sawyer, Starkville; Frank Swalm, Brookhaven; Joe A. Sheppard, Birmingham; W.N. Simineau, Quincy; E.H. Tucker, Union; Nell Wofford, State College; H.L. Yeatman, Maben; Mrs. C.L. Hunsucker, Lucien; Anita Kinard, Louisville; Mrs. Hester Ware, State College; Al A. Featherston, Brooksville; and Ethel Watkins, Cedar Bluff.

BUSINESS RESEARCH STATION RELEASES JANUARY STATISTICS

During the month of January, the Business Research Station's index to general business activity for Mississippi showed a drop of 4% under December, 1949. Seasonal factors played a part in the 18 point drop during January. Sales tax collections, life insurance sales and construction awards were the chief depressing factors. The index dropped from 301 per cent of the adjusted average (1939-1940) to 283 per cent. It is interesting to note that January 1950 marks the first time since the Business Research Station has been charting business activity, that there was a drop in the relative January level. The index stood at 291 per cent of the 1939-1940 adjusted average on January 31, 1949, 8 points higher than this year. This further indicated that the upward trend has definitely leveled off and may turn downward before the year's end, according to Professor J. J. MacAllister, editor of the Business Review.

General business activity was 2% under January, 1949. Four of the indicators—bank debits, money orders issued, registration licenses and sales tax collections—dropped below their January 1949 level. The largest increase was shown by gas connections; otherwise gains were relatively small. Construction awards dropped substantially when compared with either last January or December. However, the outlook remained rather bright, as there was a \$19,017,000 total in unlet contracts at the end of the month. Oil severance tax collections were down 22 per cent when compared with last January.

The employment situation took on a somewhat less favorable aspect. Unemployment definitely appeared to be on the increase. Job applications and initial claims, both indexed to unemployment, rose rather sharply during the month. Job applications were up 57 per cent over December and initial claims showed a 40 per cent increase in the same comparison. Compensable and waiting period claims were up 42 per cent from December. Non-agricultural placements and referrals both dropped below their December 1949 levels.

Thirteen of the sixteen trade areas in the state reported less business activity in January than a year earlier for the same month. The largest drop, 15 per cent, fell in the Clarksdale area and the smallest, 1 per cent, was registered in the Meridian district. Other losses ranged from 2 per cent in the Corinth and McComb district to 8 per cent in the Greenwood district. The Gulfport-Biloxi area reported a 12 per cent increase over last January and the Natchez district has a 21 per cent gain for the same comparison. The other increase came in the Hattiesburg area, where business was 5.4 per cent in excess of last January.

DR. REID WILL ADDRESS AGRICULTURAL ECONOMICS SEMINAR

Dr. Margaret Reid, who will speak at the Social Science Round Table on Monday evening, March 20th, will also address the Agricultural Economics seminar on Monday afternoon at 3 o'clock, room 110 Montgomery Hall. She will deal with consumption data of interest to agricultural economists. Dr. R. J. Saville, head of the department, has invited anyone on the campus who may be interested to attend the seminar at that time.

SOCIAL SCIENTISTS PARTICIPATE IN SERIES OF LECTURES FOR VETERANS' WIVES

Dr. Paul Carter, Dr. Fred Neal, and Mrs. Harald Pedersen are among the speakers in a series of campus lectures sponsored by the Department of Adult Education on the general subject, "The Modern Home." Dr. Carter spoke on the subject, "Marriage Problems and Adjustments" on March 7th, and on "Problems of Parenthood and Child Training" on March 14th. On March 28th, he will lecture on "Planning and Managing Family Finance." On March 21st Dr. Fred Neal, associate professor of philosophy and religion, will speak on "The Spiritual Life of the Home." On April 11th Mrs. Harald Pedersen will speak on "The Home and the Community." Mrs. E. C. Hendley is in charge of the lecture series. Meetings are held each Tuesday evening at 8 O'clock in the Adult Education library on the ground floor of Lee Hall.

AGRICULTURAL ECONOMISTS PIT TRACTORS AGAINST MULES

The March issue of Mississippi Farm Research, which is published by the Mississippi Agricultural Experiment Station, contains an abstract of a forth-coming Experiment Station circular dealing with the comparative cost of mules and tractors on small farms. The study was made by James P. Gaines, of the Department of Agricultural Economics at Mississippi State, and Grady B. Crowe, who is here on special assignment from the Bureau of Agricultural Economics. The data indicate that 30 acres of crop land approximate the point where the use of the tractor becomes more economical than the use of mules.

MANAGEMENT CONFERENCE CONVENES IN JACKSON ON MARCH 23RD

The second annual Mississippi Management Conference will meet at the Hotel Edwards in Jackson on March 23rd. The meeting is arranged and sponsored by the Department of Management in the Mississippi State College School of Business together with the student chapter of the Society for the Advancement of Management. The subject for the conference is "The Human Element in Management." Two morning sessions will be held. The first of these will deal with "Ingredients of Workable Labor Relations." The moderator of this session will be Dr. L. T. Hawley, of the University of Alabama, while Henry Haller, of International Harvester, and John Schulte, of the CIO, will participate in the discussion as representatives of management and labor respectively. The other morning session will deal with "A Labor Lawyer's View of Current Management-Labor Relations." The moderator will be C. A. Sullivan, of Jackson, and two other lawyers, Samuel Lang, of New Orleans, and Will S. Henley, of Jackson, will participate in the discussion. At a luncheon conference Dr. Henry G. Hodges, an authority on city administration and a lecturer in management at the University of Florida, will speak on the subject, "Management Methods." Three afternoon sessions will deal with "The Price of Poor Employee Relations," T.J. Casey, Illinois Central Railroad, moderator; "Effective Two-Way Communication," Richard J. Stockham, national director of SAM, moderator; and "How to Secure Employee Cooperation in Cost Reduction," L.J. Neuman, Sears, Roebuck and Company, moderator. Participating in the afternoon discussions will be Donald J. Render, LeTourneau Industrial Relations Manager; G.G. Eubank, of Kimberley, Clark Corporation; G.J. Willingham, Illinois Central Railroad Personnel Director; James R. Massey, International Harvester Public Relations Director; Donald D. Gilman, Operations Manager of Mississippi Products; and C.B. Rutledge, Personnel Manager of Mississippi Products. Presiding chairman of the morning session will be A. A. Spencer, president of Southland Oil; presiding at the afternoon session will be Orrin H. Swayze, vice president of the First National Bank of Jackson. Burnett Giles, a student in the School of Business, will serve as general chairman of the conference. W.K. Denson is president of the student chapter of SAM at Mississippi State.

DR. DICKINS HEADS HOME ECONOMICS PROGRAM OF SOUTHERN AGRICULTURAL WORKERS CONFERENCE

Dr. Dorothy Dickins, head of the Home Economics Department, has been chosen as chairman of the Home Economics section of the Southern Agricultural Workers Conference for next year.

INSURANCE LECTURES BEING GIVEN ON CAMPUS

A series of ten lectures covering many problems of vital interest to students planning to enter the field of insurance was initiated recently under the sponsorship of the School of Business and Industry. A similar program was undertaken under the leadership of Professor Malcolm Gray during the fall semester, and the success of the venture has brought a continuation of the program during the spring session. Not only the business angle but also the social and economic aspects of the insurance business are being dealt with. The series of lectures is being given on Wednesday mornings at 11 o'clock in Room 100 of the Business Education building. Mr. Gray has invited all persons interested in the subject of insurance to be present.

FARM PRICE STUDY FOR FEBRUARY SHOWS RISE

A study of prices received by Mississippi farmers during the month of February shows a rise of 7 points over January, to 238% of the 1909-14 average. The study was made by Professor D. W. Parvin and W. E. Christian, Jr., of the Department of Agricultural Economics, and published in the March issue of Mississippi Farm Research.

LECTURES

Dr. Glover Moore, Professor of History, spoke before the American History classes at the Starkville High School, Thursday, March 9.

On Tuesday March 14, Dr. John K. Bettersworth addressed the Starkville Civic Club on the subject, "Progress in Citizenship."

On Tuesday, February 14, Colonel George N. Randolph, Lecturer in History, spoke before the Starkville Woman's Club on the subject, "The Population Problem." He also spoke recently at the meeting of the YMCA Cabinet on the subject, "Hobbies."

Dr. John K. Bettersworth will address the Clarksdale chapter of the United Daughters of the Confederacy on March 24 using as his subject, "Did The Free State of Jones Secede from the Confederacy?"

WATSON TO JOIN TULANE STAFF IN PUBLIC HEALTH

Mr. Robert Bruce Watson has resigned his position as assistant professor in the department of History and Government at Mississippi State College, effective May 31, 1950, in order to accept a new position as assistant professor of Biostatistics in the department of Tropical Medicine and Public Health, in the School of Medicine, at Tulane University, New Orleans, effective next July 1.

Mr. Watson joined the faculty at Mississippi State College in January 1949, coming to Mississippi from Jacksonville, Florida, where he had acted as Director of Research for the State Regional Office of the War Assets Administration.

As a member of the Tulane School of Medicine Mr. Watson will have an opportunity for extensive research and administrative planning, as well as teaching on both the undergraduate and graduate levels, in Public Health. Acceptance of this position will enable Mr. Watson to continue his profession of Public Health after a lapse of several years spent in administrative work with the Federal Government, in the Reconstruction Finance Corporation, Federal Emergency Relief Administration, United States Public Health Service, and the Social Security Board, from the years 1932 through 1946.

After receiving his bachelor's degree at the University of Pennsylvania in 1920, Mr. Watson spent some time teaching at that University and in graduate work at Columbia University before attending Massachusetts Institute of Technology for three years (1924-27) on the first fellowship granted by the National Tuberculosis Association, at the end of which he was awarded his master's degree in Public Health. For several years before entering the Federal service, Mr. Watson acted as Statistician for the National Tuberculosis Association and was also on the staff of several state and local tuberculosis associations throughout the United States, engaged in research and public relations in various capacities.

While at Mississippi State College, Mr. Watson has been active in the organization of the first Mississippi Chapter of the American Association of University Professors, being Recording Secretary at the present time. He is also an active member of the Southern Political Science Association, the American Public Health Association, the Southern Safety Conference, and the Mississippi Society of Sons of the American Revolution.

TIMES PICAYUNE TELLS OF HAYDEN STUDY

The Sunday Times Picayune of March 4th contains an account of the research being conducted by J. J. Hayden, Jr., a graduate student in history, who is writing the history of Mississippi's oldest resort town, Pass Christian. Mrs. Hayden, who is assisting her husband in the research on this project, was interviewed by a reporter from the Times Picayune. One of the most interesting outcomes of the research being conducted on Pass Christian is a reopening of the controversy as to how the town was named. It seems most unlikely that the town was named for a Christian Ladner who was supposed to be a member of the Iberville Expedition of 1699. Mr. Hayden is attempting to track down the actual facts in the case.

THE SOCIAL SCIENCE COUNCIL
PUBLICATIONS
The Social Science
BULLETIN
BOX 148 STATE COLLEGE, MISS.

Mr. Marion T. Loftin
Campus

